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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,652	01/13/2006	Robert Henri-Marcel Stouffs	19790-005US1	1660
26191 7590 04/14/2010 FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER BRUNSMAN, DAVID M				
ART UNIT 1793		PAPER NUMBER		
NOTIFICATION DATE 04/14/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/564,652

Applicant(s)

STOUFFS ET AL.

Examiner

David M. Brunsmann

Art Unit

1793

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-8,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,8,10 and 11 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

Applicant's response filed 1-4-2010 has been carefully considered. The examiner disagrees with applicant's analysis of the primary reference. In particular, applicant's reliance on the alternative statements with respect to fractionation, concentration or hydrolysis at column 6, lines 49, 61 and 66 respectively. This part of the specification describes different possible embodiments of the invention. With respect to the treatment of the maltitol syrup following catalytic hydrogenation thereto, the examiner's rejection as set out below relies upon the first embodiment commencing at column 6, line 46.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 8, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6344591.

The patent teaches a method of preparing a maltitol product comprising the successive steps of liquefying starch milk (column 4, lines 32-53) to a dextrose equivalent of less than 4 (i.e. 2-4, column 4, line 45), subsection the liquefied product to a saccharification step in the presence of a beta amylase (column 5, lines 8-9) and at least one debranching enzyme of pullulanases or iso-amylases (column 5, lines 22-23), the process may include treatment with fungal alpha-amylase throughout (i.e. before, during and after the beta amylase treatment; column 5, line 35). The syrup produced by the saccharification step contains at least 96% by weight maltose (column 5, lines 45-

46). This syrup is fed to a molecular sieve stage that may consist of chromatographic separation to obtain a maltose rich (i.e. enriched from 96%) phase (column 5, lines 55 - column 6, line 5). No loss of maltitol values are disclosed in the patent in this stage. The maltose enriched syrup is then catalytically hydrogenated to maltitol (column 6, lines 17-18) to form a product of greater than 85% maltitol encompassing the instant claims (column 6, line 45). This maltitol containing product is subjected to further fractionation (column 6, lines 50-53), concentrated (column 6, line 54) and a maltitol product (D) crystallized therefrom (column 6, line 55). The first embodiment of the example forms a product of greater than 99% maltitol (disclosing no measurable impurities) which is dried to less than 1% moisture (greater than 99% maltitol) and analyzed by electron microscope. The similar process conditions employed would be expected to produce an undried crystal of less than 7% moisture. With respect to claim 6, the mother liquor of the patented process (liquid maltitol coproduct (E)) is recycled (column 6, lines 56-57) upstream of the latter chromatographic fractionation where it is mixed with maltitol syrup from the hydrogenator, then fractionated to produce a maltitol rich fraction (G), containing greater than 99% maltitol in the first embodiment of the example.

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record fails to teach or suggest mixing the crystalline maltitol intermediate product (D) with the liquid maltitol coproduct (E) or the fraction (G) to obtain a liquid product (H).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, Th, F, Sa; 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David M Brunsman/
Primary Examiner, Art Unit 1793

DMB